Quality Improvement for Better Nutrition Services in Ethiopia

The Empowering New Generations to Improve Nutrition and Economic Opportunities (ENGINE) project is designed to assist the Government of Ethiopia in implementing nutrition policies and programs to more effectively address the multi-sectoral, underlying causes of maternal and child undernutrition in five regions of the country. A core component of this USAID flagship integrated nutrition project is to improve the quality and delivery of nutrition and health care services in Ethiopia. ENGINE created and implemented a quality improvement (QI) process to develop health facility capacity to identify issues, implement changes and track progress in the effective delivery of nutrition services. The Continuous Quality Improvement (CQI) implemented through ENGINE was drawn from existing methods operating in Ethiopia and global experience in QI measures for health care.

CONTINUOUS QUALITY IMPROVEMENT

Continuous Quality improvement is aimed at creating an organizational culture committed to continuous improvement in skills, teamwork, process and service quality. The CQI process entails comparing standards with performance and identifying bottlenecks in the provision of services that meet quality standards. Through the process, opportunities for small changes or adjustments are found, and data are collected, reviewed and evaluated to determine progress and performance.

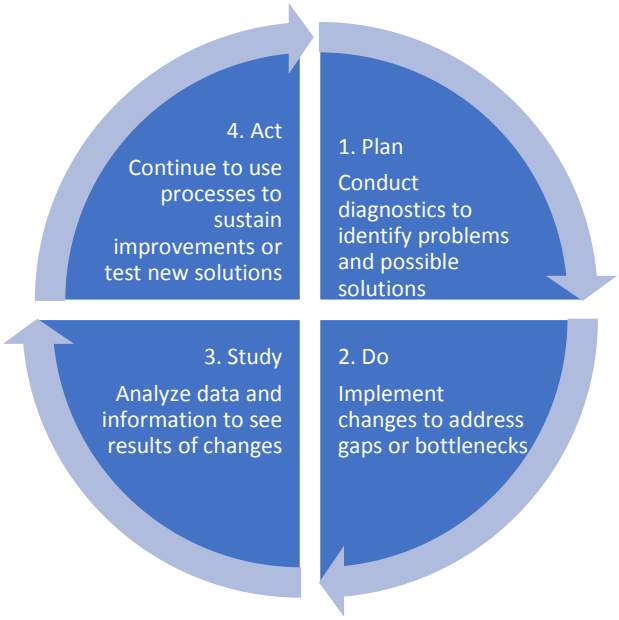
Initial Quality of Nutrition Services

To initiate the process, ENGINE implemented a formal assessment of nutrition services in 24 health facilities including health centers and health posts in eight woredas across Tigray, Amhara, Oromia and SNNPR to identify barriers to providing quality services and determine client satisfaction and perceptions of services, as well as competency of service providers. Gaps in quality were identified in nutrition counselling, supply availability of micronutrient supplements, deworming medication, and key health worker job aides. While interpersonal skills of health workers were generally good, observation of counselling sessions showed weakness in the ability of the health worker to communicate about child growth and to negotiate improved infant and young child feeding practices and related water, sanitation and hygiene behaviors. On the positive side, nearly all of the women interviewed rated the services received as good or very good.

Quality of Nutrition Services

Reported by:	**Observed:**
Health Facility Staff:	Poor recording
Lack of equipment	Inadequate IYCF counseling
Lack of medicines	No nutrition assessment of pregnant women; BMI
Lack of micronutrient supplements	No tests for anemia
Lack of therapeutic feeding supplies	Lack of information on side effects of iron supplements
Inadequate quality of counseling materials	Shortage of child health cards
Inadequate supply of counseling materials	No water
Inadequately trained staff	No medicines
Clients:	No micronutrient supplements
Shortage of medications and supplies	No counseling spaces
Long wait times	No counselling or other promotional or educational materials

ENGINE's Quality Improvement Processes



Based on the results of the QI assessment, ENGINE worked in consultation with Woreda health officers and health facility workers to pilot a QI model in ten health centers and 43 health posts. Health facility personnel, and woreda and zonal staff working on nutrition were trained in the quality improvement process and tools. Staff developed the skills to identify problems using tools including flow charts, cause-and-effect diagrams and force field analysis, and how to implement the process for quality improvement in their health facility. Participants were taught to use the tools to identify problems, inefficiencies and bottlenecks in the provision of nutrition services in their health facilities, and tasked with using the approach in their facilities. In addition, participants were trained in the use of Lot Quality Assurance Sampling (LQAS) to monitor performance after quality improvement measures were put in place. LQAS is a classification technique designed to identify areas of 'adequate' or 'inadequate' performance. Participants were provided with checklists to measure performance of ANC, post-natal and under-5 nutrition counseling, micronutrient supply and data quality using a LQAS methodology and clinic records. Participants were also trained on the elements and importance of data quality and relevant nutrition indicators for quality improvement processes.

After the training the staff formed teams at their facilities including, a senior level participant, an administrative or finance representative, a staff member involved with implementing nutrition activities, staff involved in records and management systems and a person designated to be the QI officer. The overall process involves a continuous cycle of: "planning" by using tools to identify issues and possible solutions; "doing" entailing testing the changes or improvements; "studying" the data and information

Quality Improvement Process: Addressing Iron Folate (IFA) Supply Deficits

Plan: Health facility QI team undertakes an analysis of why IFA stocks are continually low and explore what they can do to change this situation

Do: QI team implements reporting protocols, purchases iron folate tablets using revolving funds, strengthens lines of communication, creates a timeline for stock data review and assigns responsibilities for keeping track of IFA stores.

Study: QI team monitors IFA stock levels over time after putting new processes in place and sees improvements

Act: QI team supports new protocols that ensure a supply of IFA and uses LQAS tools to continue monitoring performance

available from monitoring systems; and "taking" actions based on the results.

Results of ENGINE's Quality Improvement Processes

ENGINE's initial experiences with quality improvement processes at health facilities show signs that these efforts are empowering staff to address nutrition service concerns. At Sirbo and Loya Health Centers, in East and West Oromia respectively, the teams decided to focus on improving nutrition counseling during antenatal care (ANC) visits of pregnant women. In Sirbo, the team set an ambitious target of increasing the provision of nutrition counseling during ANC visits from a starting point of 8% to 85% of women counselled. Monitoring data show that in week one of the QI process no women were counselled on nutrition during their ANC visit compared to 13 of 13 women 18 weeks later.

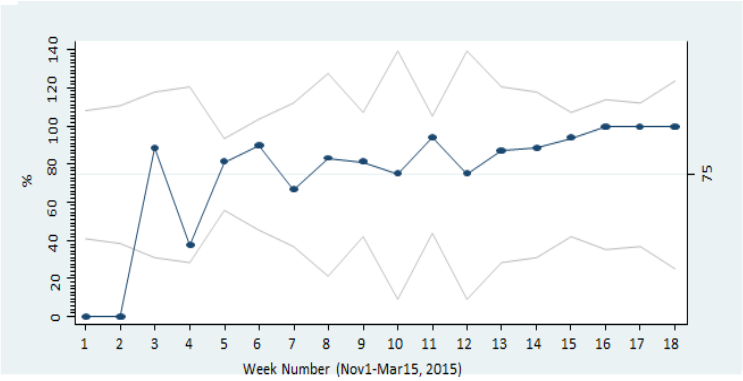


Fig1. Trend of pregnant women counseled on nutrition over the last five months at Sirbo H/C in East Oromia, 2015

In Loya Health Facility, the team's goal was to increase nutrition counseling during ANC visits from 2% to 75%. The facility introduced new logbooks to register nutrition counseling and put a peer supervision system in place. Monitoring performance of counseling showed an overall improved trend in the number of women who received counseling, but continued data monitoring was helpful to show when dips occurred and more attention was needed.

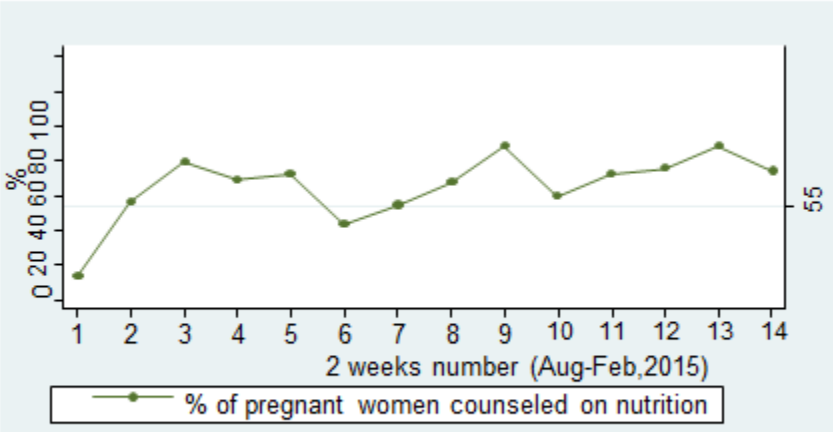


Fig 2: Trend of pregnant women counseled on nutrition over the last seven months at Loya HC in west Oromia, 2015

Delgi Health Center in Amhara and Deri Health Center in SNNPR, the teams decided to focus on the provision of iron-folate supplements for pregnant women. Health center teams reviewed the data and found issues with the continuity of IFA supply. In both facilities the teams implemented monthly stock checks, kept updated records and established direct lines of communication with the purchasing facility.

They also established peer supervision mechanisms to monitor ANC visits and coached service providers. In Deri, the team set a goal that 95% of women would receive iron-folate supplements and monitored data to track progress. The results show the success of these measures. The health facility surpassed its goal within 4 weeks after which 100% of women received iron-folate supplements according to monitoring data for six months. Delgi Health Center also increased the percentage of pregnant women receiving iron-folate from 20% to almost 100% over a six month period in which they continued to monitor data and make improvements.

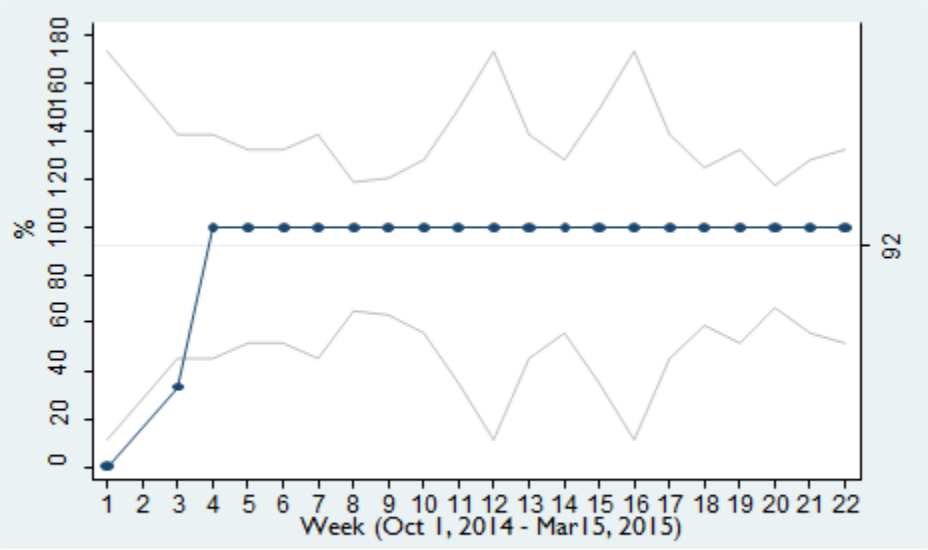


Fig 2: Trend of Iron provision for pregnant women over the last six months at Deri H/C in SNNPR, 2015

In the Loya Health Facility similar efforts were put in place to increase the provision of zinc for children with diarrhea. The team set a target to increase the proportion of children under 5 who presented with diarrhea who received zinc from 14% to 95%. The results were achieved quickly by assessing and addressing the supply problem; within a month they reached and then sustained their target.

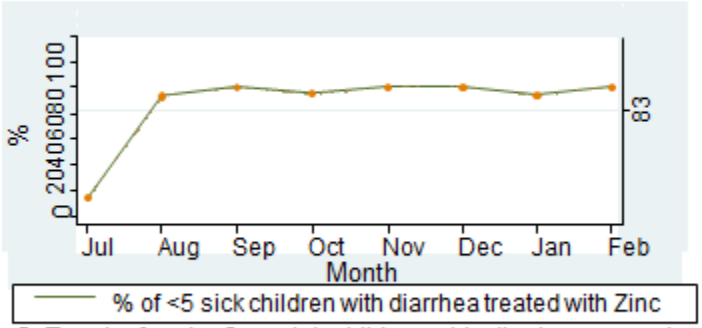


Fig 5: Trend of under-five sick children with diarrhea treated with Zinc over the last seven months at Loya HC in west Oromia, 2015

ENGINE's support for the QI process has drawn the attention of facility staff to the importance of nutrition services. A participating health extension worker from Soyoma Health Post in West Oromia states: "*Previously we were not giving due attention to nutritional counseling on key messages but now after the QI initiative we started giving quality nutritional services at health post and community levels by taking enough time and focusing on the gestational age.*"

Challenges and Lessons Learned. The QI process is not without its challenges related to both implementing the process itself and overcoming the obstacles to providing better nutrition services. High staff turnover in facilities reduced the capacity to implement the approach. Some staff didn't see the value in what they perceived as "extra" work. Particular issues identified as limitations in nutrition services during the QI process were more difficult to address, for instance lack of space for nutrition counseling and the limited engagement of woreda offices and insufficient support from the PHCU heads. The QI process worked best when the facility management, and the woreda health staff were regularly involved. Involving all health facility staff in training, and clarifying their specific roles in the QI process and the outcomes desired also contributed to success.

Next Steps: ENGINE's support for multi-sectoral programming includes major components dedicated to strengthening the capacity for and institutionalization of nutrition programs and policies at national, regional, zonal and woreda levels, and improving the quality and delivery of direct nutrition services within the health system. Continuous Quality Improvement measures contribute both to improved service provision and strengthened staff capacity to monitor, implement and institutionalize quality nutrition services.

The QI process has put the responsibility for identifying and seeking solutions to poor quality of services in the hands of service providers and helped them to realize their ability to identify and address the gaps in service provision. ENGINE is expanding the reach of the QI methodology to additional health facilities through training, and by offering study and learning visits across facilities to share their experiences and best practices in improving the quality of nutrition and related services. To data, ENGINE has introduced QI in 143 PHCUs' services in four regions. Four primary health care units (PHCUs) in four regions offered exchange visits and a total of 165 HWs, HEWs, zonal and woreda offices participated. ENGINE's approach to QI will serve as an important means to achieving the 2015-2020 Health Sector Transformation Plan which emphasizes the need to improve quality of health programs.

BENEFITS OF CQI

"Previously we were not documenting pregnant women counseled on nutrition consistently and did not take MUAC measurement. After CQI initiative, quality of nutritional services really becomes our focus and helped me to give quality nutritional counseling. I started monitoring the progress effectively by taking a few data on regular basis," says a nurse at Loya Health Center